

Abstract

A surface of a semiconductor wafer which has been lapped is ground. This removes a damage caused on the wafer surface during lapping, thereby increasing the flatness of the wafer surface. Next, the wafer is subjected to composite etching and the both surfaces are polished, i.e., subjected to mirror polishing while the wafer rear surface is slightly polished so as to obtain a single-side mirror surface wafer having a difference between the front and the rear surfaces. As compared to mere acid etching or alkali etching, it is possible to manufacture a single-side mirror surface wafer having a higher flatness.